Spring 2019

Bedo case study

Bruce Arendt
Iowa State University

DRIFTLESS FINANCIAL ADVISING

115 Trout Lake Rd. Decorah, IA 52100 563-382-6666 **The premier financial planning organization in the tri-state area of Iowa, Missouri, and Illinois   (Fictitious names being used throughout document)**

A comprehensive financial plan prepared for Mia and Tyler Bedo by Bruce Arendt

Sept. 12, 2018

Confidential

Mia and Tyler Bedo

727 Success Lane

Springfield, MO

Sept. 11, 2018

Dear Mia and Tyler:

Welcome to Driftless Financial Advising and it is our honor to serve you in all of your financial needs. We pride ourselves on developing and maintaining strong client/planner relationship and work with you to achieve your financial goals and dreams. In this day and age and it is important for clients to understand their rights to privacy so please review our Privacy Statement found on page 5.

Driftless Financial Advising was established in 1982 by my mother, Gladys Arendt and in accordance with her founding principles, we focus on creating a specialized financial plan for each client by addressing their goals. We find that offering the client a number of alternatives to each goal helps the client make the best educated decision with regards to financing. We feel we have a diverse selection of financial options to cover all of your needs and address all levels of risk.

Because the financial marketplace changes every day, monitoring your portfolio is a priority for us and we do this on a basis agreed upon by the client with a minimum requirement of once a year. As financial goals and needs change throughout your lives, we stress the importance of clear communication between client/s and planners.

Because communication is the backbone of our company, we use various ways in which to convey information. Please note that if you have a preferred method, we will try to accommodate your wish.

Again, thank you for choosing Driftless Financial Advising and we are pleased to help you reach your financial goals.

Regards,

Bruce Arendt

President of Driftless Financial Advising

Engagement Letter

Sept. 11, 2018

Mia and Tyler Bedo

Dear Mia and Tyler,

Thank you for contacting Driftless Financial Advisors (DFA) and we are privileged to serve you. The purpose of this letter is describe the services we will provide for you and if there are any changes to the services, we will communicate and agree upon those changes mutually.

In correlation with the Certified Financial Planning Board's Standards of Professional Conduct, we adhere to the following steps:

1. Establishing and defining the client-planner relationship;
2. Gathering client data, including goals;
3. Analyzing and evaluating the client's financial status';
4. Developing and presenting financial planning recommendations and/or alternatives;
5. Implementing the financial planning recommendations; and
6. Monitoring the financial planning recommendations.

The purpose of this letter is to outline our responsibilities to you as per our meeting last week. With your financial information, we will provide the following services:

1. Review and Evaluation

Using our in-house professional planners, we will utilize the financial information to run a complete analysis of your current financial situation. This includes reviewing your balance sheet, assets and liabilities, insurance coverage, and retirement plans.

2. Written Plan

After running a complete analysis of the information, a formal review will be presented to you and in particular we will focus on a summary of the results and recommendations. Because the complete analysis is rather lengthy, the summary gives us the best overall view of the financial situation.

While the report will show many different areas, our intent is to highlight areas that have an impact on your financial goals listed. Based on these goals we will work with you to address each goal and the actions required to achieve each goal. At times we may recommend certain actions but the client needs to feel comfortable with any action taken.

Once we have reviewed all of the materials and adjusted any goals, we will provide a revised version of recommendations and goals, along with actions, and present this to you. As part of our commitment to you, we recognize that the plan and recommendations may change and need to be adjusted, so we adhere to regular conversations and follow-up to insure everyone is pleased.

3. Fees

Our regular fees are based on an hourly rate of $75 per hour but do not include a complete financial analysis which is a separate fee of $500. Excluding the complete analysis of $500, we expect the minimum charge to be $450 and the maximum to be $900. The billing will occur at the end of each month for that months charges and payment is expected within 30 days of the mailing.

4. Implementation

Once we have decided on particular financial decisions and strategies, we will help you with that implementation. Because you may have questions as we proceed through this process, you are always free to call or stop into our office to clarify any questions you may have. There is no fee for this type of communication and often our clients find our FAQ page on our website extremely helpful. If the discussion requires a scheduled meeting, we will bill at our regular hourly rate of $75.

5. Limitation on Scope of Services

Due to our fiduciary responsibilities, the following services are not included:

- Specific market analysis
- Specific insurance policies
- Legal advice
- Specific fund or company fund requirements
- Debt counseling

The above services may be available through our other offices and if needed, the correct professional will be scheduled and billed depending on the individual rate which varies from $50- $250 per hour.

If you have read this document and agree to the conditions and billing information, please sign your names and date with today's date.

Sincerely,

Bruce Arendt

Driftless Financial Advisors

This letter states the terms and conditions of engagement between Mia and Tyler Bedo and Driftless Financial Advisors to provide financial planning services.

Signed___________________________________ Print Name__________________Date_______

Signed___________________________________ Print Name__________________Date________

Table of Contents

Privacy Statement

Driftless Financial Advising recognizes that our relationships with current and prospective clients are based on integrity and trust. We work hard to maintain your privacy and to preserve the private nature of our relationship with you. We place the highest value on the information you share with us. DFA will not disclose your personal information to anyone unless it is required by law or at your direction. We will not sell your personal information. Flow will provide the privacy statement to all clients annually.

We want our clients to understand what information we collect, how we use it, and how we protect it responsibly.

WHY WE COLLECT YOUR INFORMATION

We gather information about you so that we can:

- *Help design and implement the investment and planning related services we provide you; and*
- *Comply with the Federal and State laws and regulations that govern us.*

WHAT INFORMATION WE COLLECT AND MAINTAIN

We may collect the following types of "nonpublic personal information" about you:

- *Information from our initial meeting or subsequent consultations about your identity, such as your name,*
- *address, social security number, date of birth, and financial information.*
- *Information that we generate to service your financial needs.*
- *Information that we may receive from third parties with respect to your financial profile.*

WHAT INFORMATION WE DISCLOSE

We are permitted by law to disclose nonpublic information about you to unaffiliated third parties in certain circumstances. For example, in order for us to provide planning or investment management services to you, we may disclose your personal information in limited circumstances to various service providers, such as our clearing firm.

Otherwise, DFA will not disclose any personal information about you or your account(s) unless one of the following conditions is met:

- *We receive your prior written consent; or*
- *We have documentation that the recipient is your authorized representative; or*
- *We are required by law to disclose information to the recipient*

Arrangements with companies not affiliated with DFA will be subject to confidentiality agreements.

HOW WE PROTECT YOUR PERSONAL INFORMATION

Privacy has always been important to DFA. We restrict and limit access to client information only to those who need to carry out their business functions. We maintain physical, electronic, and procedural safeguards to protect your confidential personal information. (Flow Financial Planning, 2018)

Code of Ethics & Professional Responsibility

CFP Board adopted the *Code of Ethics* to establish the highest principles and standards. These Principles are general statements expressing the ethical and professional ideals certificants and registrants are expected to display in their professional activities. As such, the Principles are aspirational in character and provide a source of guidance for certificants and registrants. The Principles form the basis of CFP Board's *Rules of Conduct*, *Practice Standards* and *Disciplinary Rules*, and these documents together reflect CFP Board's recognition of certificants' and registrants' responsibilities to the public, clients, colleagues and employers.

Principle 1 – Integrity: Provide professional services with integrity.

Integrity demands honesty and candor which must not be subordinated to personal gain and advantage. Certificants are placed in positions of trust by clients, and the ultimate source of that trust is the certificant's personal integrity. Allowance can be made for innocent error and legitimate differences of opinion, but integrity cannot co-exist with deceit or subordination of one's principles.

Principle 2 – Objectivity: Provide professional services objectively.

Objectivity requires intellectual honesty and impartiality. Regardless of the particular service rendered or the capacity in which a certificant functions, certificants should protect the integrity of their work, maintain objectivity and avoid subordination of their judgment.

Principle 3 – Competence: Maintain the knowledge and skill necessary to provide professional services competently.

Competence means attaining and maintaining an adequate level of knowledge and skill, and application of that knowledge and skill in providing services to clients. Competence also includes the wisdom to recognize the limitations of that knowledge and when consultation with other professionals is appropriate or referral to other professionals necessary. Certificants make a continuing commitment to learning and professional improvement.

Principle 4 – Fairness: Be fair and reasonable in all professional relationships. Disclose conflicts of interest.

Fairness requires impartiality, intellectual honesty and disclosure of material conflicts of interest. It involves a subordination of one's own feelings, prejudices and desires so as to achieve a proper balance of conflicting interests. Fairness is treating others in the same fashion that you would want to be treated.

Principle 5 – Confidentiality: Protect the confidentiality of all client information.

Confidentiality means ensuring that information is accessible only to those authorized to have access. A relationship of trust and confidence with the client can only be built upon the understanding that the client's information will remain confidential.

Principle 6 – Professionalism: Act in a manner that demonstrates exemplary professional conduct.

Professionalism requires behaving with dignity and courtesy to clients, fellow professionals, and others in business-related activities. Certificants cooperate with fellow certificants to enhance and maintain the profession's public image and improve the quality of services.

Principle 7 – Diligence: Provide professional services diligently.

Diligence is the provision of services in a reasonably prompt and thorough manner, including the proper planning for, and supervision of, the rendering of professional services. (CFP Board, 2018)

Company Profile

Driftless Financial Advising was founded in 1982 by Gladys Arendt and named after the region she was born in and lived her entire life. The symbolism of an area carved by glaciers with beautiful natural scenery is clearly seen by how DFA carries out its business. We believe financial planning is an ongoing process and like the glaciers that formed this area, the end result is to help the client live their life with fewer financial concerns.

Throughout the years, DFA has grown considerably and we offer our clients a wide range of services. We employ a staff that consists of attorneys, accountants, financial counselors, insurance agents, and debt counselors. We believe that financial planning should not put barriers in the way of the client and by housing the necessary specialist, this allows the client to only have to visit one office for their financial needs.

Mission Statement

To help clients achieve their financial goals while maintaining open communication and professionalism.

Client Profile

Name	Tyler Bedo
Age	42
Occupation	Sales Consultant
Employer	Golden Tee Golf Association, Inc.
Address	727 Success Lane Springfield, MO

Name	Mia Bedo
Age	42
Occupation	Career Counselor
Employer	The Family and Career Institute
Address	727 Success Lane Springfield, MO

Dependent Information

Name	Becky
Age	5

Goals

As part of the planning process, it is important to be able to articulate the specific financial goals of the clients. After an initial workshop with Mia and Tyler, the couple wants to focus on achieving the following goals:

- Fund Becky's college education
- Establish a cash reserve of 6 months
- Review and update insurance policies, in particular life insurance
- Retire at 62 for Mia and Tyler with sufficient assets to afford Mia to open an art gallery, add an addition to house, and allow Tyler to volunteer
- Establish an estate plan to keep financial matters private

Universal Financial Assumptions

- Universal inflation rate of 3.0% per year
- Prime interest rate of 3.25%
- Life expectancy of 95 for both Tyler and Mia
- 30% combined state and federal tax bracket and 25% tax bracket at retirement

Executive Summary

The Executive Summary is meant to give each client a brief overview of the financial plan recommendations. Our focus at DFA is to help our clients reach their financial goals and by reviewing and implementing the financial strategies, we feel this puts our clients on the best financial path. With regular review, these recommendations can change and for that reason, no matter what decision the client makes, it is important to remain current with his/her financial situation

Income Tax

One of the biggest changes to this section of the plan is the new 2018 tax policies. In particular, the tax brackets have changed and utilizing the standard deduction will come into play. Using charitable giving no longer provides a tax benefit and for that reason we have recommended reducing those contributions. In addition, reducing the FICA withholdings from you pay and shifting that additional income to cover expenses allows you to increase savings and cover insurance costs. It is important to note that your tax burden will increase minimally for the upcoming year.

Insurance

We feel that increasing your life insurance coverage is one of the most important aspects of this plan. Our recommendation is for both Mia and Tyler to take out a 20 year term policy to augment their current policies. We feel with this additional coverage any unforeseen tragedies will be sufficiently covered.

With regards to property and casualty insurance we looked at increasing your coverage for home while utilizing bundling to decrease the cost. Your current umbrella policy was also underfunded and our recommendation is to increase that to $1,000,000. We felt the auto insurance was sufficient but your boat needed coverage.

Non-Retirement Needs and Investment

In this section we make the recommendation to fund a MOST 529 Savings Plan for Becky's college education. By shifting some of the monies going to your non-retirement funds, contributing $450/month is reasonable and puts your educational goal within reach. Additionally selling the EE bonds and transferring those funds into the MOST 529 plan will increase the probability that Becky's college will be funded. We also considered supplementing her funding by work study, grants, and scholarships.

The other main goal was for Mia to open an art gallery and put an addition onto the current home. Because you have adequate funds in you non-retirement investments (minus the EE Bonds) we feel this will be more than adequate for those projects when the time comes. A recommendation of asset reallocation was made as we feel the time frame warrants a more aggressive approach.

Retirement Income Needs and Investments

This section gives a good analysis of your retirement needs and the recommendations in order to achieve a financially healthy retirement. Utilizing two needs analyses, and incorporating the projected Social Security benefits, we were able to conclude that you are very close to retiring at your desired goal of 60. We do feel that because you will not be able to receive Social Security at that time, it may be necessary to have at least one spouse working for additional income along with health benefits.

Utilizing your employer retirement plans is crucial to giving you control of your retirement schedule and we recommend reallocating your current investments along with diversifying the funds. Based on past returns, this should increase your overall fund balance.

The last thing to consider is opening a Roth IRA. This comes with a significant tax benefit and not only can be used for retirement but has other applications such as helping with college funding. The Roth IRA has the potential to be funded significantly more upon the next review of your financial plan.

Estate Planning

The desire to leave an estate to Becky yet remain private leads us to recommend setting up a Revocable Living Trust for all assets that are not exempt from probate. These items include your house, collectibles, artwork, and jewelry. Also updating your will and including power of attorney designations and medical directives is imperative to ensure all estate issues are handled in case an untimely death or incapacitating illness occur. We have also added the recommendation of completing a digital asset list due to the overwhelming increased popularity of online accounts.

Cash Flow and Net Worth

Income and Expense Statement

Earned Income	**Current**	**Proposed Changes**
Wages Salaries and Tips	100,962.00	100,962.00
Bonuses	34,233.00	34,233.00
Section 79 income	118.00	118.00
Total Earned Income	$135,313.00	$135,313.00
Unearned Income		
Taxable Interest (Savings and Money Market account)	600	600
Ordinary Dividends • Haley GI Funds • Konza Fund • Ruth Fund • Sagebrush Fund • Consumer • Eastside	 2,208 752 520 40	 2,208 0 520 0 200 860
Realized Capital Gains	0	0
Total Unearned Income	$4,120.00	$4,280.00
Total Income	$139,433.00	$139,593.00

Dedicated Expenses

Salary Reduction		
Retirement Contributions • Tyler Consumer Fund • Tyler Graham Fund • Tyler Value Fund • Tyler Eastside Fund • Tyler Companion Fund • Mia Rocket Fund • Mia Growth Fund • Mia Konza Fund • Mia International Fund	 2,053.00 2,053.00 3,423.00	 812 812 1,231 812 410 684 1,711 684 342
Health Insurance (Tyler work)	3,600	3,600
Disability Insurance (Mia work)	300	300
FSA contribution		1,200

Total Salary reduction	11,429.00	12,598
Gross Income	128,004.00	126,995
Taxes		
Social Security	10,286	10,286
Federal Tax	22,178	14,178
State Tax	6,086	6,086
Total Taxes on Salary	38,550	30,550
Debt Payments		
Mortgage Payment	13,056.00	12,708
Auto Loan Payment	5,412	5,412
Credit Card Payments	5,100	5,100
Total Debt Payments	23,568	23,220
Insurance Premiums		
Auto	2,000	0
Home	700	0
Life whole	2,064	2,064
Life Term (Mia and Tyler)	0	1,460
Umbrella	175	0
Misc. Insurance Premiums	300	300
Bundling of Home, auto, boat and umbrella insurance		2,631
Total Insurance Premiums	5239	6,455
Housing		
Real Estate Taxes	1,675	1,675
Utilities	4,200	4,200
Other household (yard service, trash)	400	400
Total Housing Expenses	6,275	6,275
Savings		
Sagebrush Fund+ dividend reinvestment	3,040	0
Haley Fund + dividend reinvestment	5,208	4,008
Individual Fixed Annuity	3,000	0
Ruth Fund + dividend reinvestment	3,520	2,320
Consumer Fund	0	2,000
Money Market Account +interest reinvestment	2,400	2,400
MOST 529 Education Savings Plan	0	5,400
Roth IRA	0	3,000

Total Savings	$17,168.00	19,128
Miscellaneous Expenses		
Food/Groceries	5,100	5,100
Clothing	2,800	2,800
Auto Maintenance	1,500	1,500
Vehicle/plate tag	450	450
Medical Costs/copay	240	240
Prescriptions	240	240
Dental and Eye Care	600	600
Telephone	1,500	1,500
Bank Charges	120	120
Personal Care	1,200	1,200
Total Miscellaneous Expenses	13,750	13,750
Total Dedicated Expenses	115,979	112,007
Total Income – Dedicated Expenses =	23,454	27,618

Discretionary Expenses

Description	**Current**	**Proposed**
Entertainment	2,700	2,700
Satellite TV	600	600
Dining out	3,300	3,300
Recreation	2,700	2,700
Travel	3,000	3,000
Savings for art/gallery	1,800	1800
Gifts to Charities • University alumni fund • Church • United Way	 1,000 4,200 1,800	 250 1.050 9450
Holiday Giving	1,800	450
Home Improvements	1,800	1,800
Dues	1,800	1,800
Subscriptions	960	960
Housekeeping Service	960	960
Pet Care Expenses	420	420
Tax Preparation Fees	400	400
Total Discretionary Expenses	29,240	25,430

Total Discretionary Cash Flow	(5,786)	2,188

Assets

Personal and Real Assets	Owner/Title	Current Value
Home	Joint (J)	250,000
Furnishings	J	45,000
Ford Taurus (3 years old)	J	20,000
Nissan Quest (5 years old)	J	15,500
Yard Equipment	J	8,000
Jewelry and other collectibles	J	10,000
Signed golf club	J	5,000
Golf clubs	J	2,500
Golf artwork	J	5,000
Aluminum boat	J	5,800
Monetary Assets		
Savings Account	J	10,000
Checking Account	J	3,500
Money Market Account	J	10,000
Checking account II	J	5,000
Investment Assets (Nonretirement)		
Miscellaneous EE Bonds	J	25,000
Haley G and I fund	J	69,000
Konza Fund	J	43,000
Ruth Fund	J	13,000
Sagebrush Fund	J	8,000
Cash Value of Life Insurance Policy	T	8,750
Cash Value of Life Insurance Policy	M	8,350
Retirement Assets		
Tyler 401(k) Consumer Fund	Tyler (T)	69,000
Tyler 401(k) Graham Fund	T	134,000
Tyler’s traditional IRA CD	T	52,000
Mia’s 401(k) Rocket Fund	Mia (M)	15,250
Mia’s Rollover IRA Ruth Fund	M	32,500
Mia’s Traditional IRA certificate of deposit	M	52,000
Conservative annuity Potsdam Fixed Annuity	M	125,000

Total Assets		1,050,150

Liabilities

Current	
Visa Credit Card	3,500
Mastercard Credit Card	2,000
Long-Term	
Home Mortgage	131,260
Auto #1	10,476
Total Liabilities	$146,307

Assumptions

The following assumptions were made in order to calculate various financial situations. As with any assumption, these numbers will fluctuate and change throughout time.

- 3.0% per year inflation rate will be used for all calculations
- 3.25% prime interest rate will be used for all calculations
- Life expectancy for both Mia and Tyler is 95 years old
- State and Federal tax of 30% combined and shifting to 25% at retirement
- Working assumptions for investment portfolios will be illustrated in the investment section of the plan.

Financial Ratios

In this section we will present the most common ratios used to assess a client's financial health. We will explain briefly what each benchmark represents and the benchmark typically used to indicate a strong financial position. By using these benchmarks, it helps us isolate where changes could occur.

Current Ratio

Monetary assets/current liabilities   Benchmark >1

This ratio measures client liquidity and shows if current monetary assets are available to pay off all outstanding short-term debts. (Grable, 2016)

Checking+Savings =$28,500

Current short-term debt from credit cards= $5,500

28,500/5,500= 5.18

This exceeds the benchmark and represents a strong current ratio.

Emergency Fund Ratio

Monetary assets/monthly living expenses   Benchmark 3-6+months

This ratio indicates the amount of time a client could live in an emergency situation without liquidating non-monetary assets or having to compromise their employment situation. (Grable, 2016). This ratio calculates monthly dedicated and discretionary expenses but leaves out the state, federal, and FICA taxes, holiday and gift giving, additional savings, satellite tv, and housekeeping.

Monetary assets =28,500

Monthly living expenses = 73,443/12=$6,120

Ratio 28,500/6,120= 4.66

This is within the benchmark but clients desire to have at least 6 months of emergency funds available so this ratio may need some attention.

Savings Ratio

Personal Savings and employer contributions/annual gross income   Benchmark >10%

This ratio indicates if 10% of gross income is going towards savings. This includes savings in retirement plans and employer contributions. (Grable, 2016)

Personal Savings

- Personal Retirement Contributions
    - Tyler- 4,108
    - Mia-3,423.33
- Employer Contributions
    - Tyler- 2,054
    - Mia – 1,027
- Investment Savings
    - Sagebrush- 3,000
    - Haley – 3,000
    - Fixed Annuity - 3,000
    - Ruth- 3,000
    - Money Market Account 1,800
- Total Savings = 24,412

Savings Ratio = 24,412/128,004= 19.07%

Ratio Exceed the benchmark by almost 9%.

Debt Ratio

Total liabilities/total assets   Benchmark <40%

This ratio helps determine if clients are carrying too much debt.

146,307/1,050,150 = 13.93%

This percentage represents a very good debt ratio.

Long-term Debt Coverage Ratio

Annual gross income/total annual long-term debt payments Benchmark >2.5

This ratio demonstrates how many times a client can make debt payments in relation to their current income. (Grable, 2016)

128,004/18,468=6.93

This is a very strong long-term debt coverage ratio.

Debt-to-Income ratio

Annual Consumer credit payment/annual take home pay   Benchmark <15%

"This ratio measures the percentage of take home pay committed to consumer credit repayment which is all revolving and installment nonmortgage debt." (Grable, p. 142)

10,512/85,214=12.34%

This is deemed to be an excellent percentage for this ratio.

"Front-end" mortgage Qualification Ratio

Annual mortgage (PITI) payment/annual gross income   Benchmark <28%-30%

Both the Front and Back-end ratios indicate the ability to repay a mortgage. Often these ratios are important for lenders.

Annual mortgage payment=principal and interest+real estate taxes+homeowners insurance premiums.

13,056+1,675+700=15,431

15,431/128,004=12%

This is an excellent percentage for this ratio.

"Back-end" Mortgage Qualifications Ratio

Annual mortgage (PITI) and credit payment/annual gross income   Benchmark <36-43%

15,431+10,512/128,004=20.27%

This is an excellent percentage for this ratio.

Analysis of Ratios

Based on all of the ratios, it appears that Mia and Tyler are on good financial standing. None of the ratios were below the benchmark, but by reviewing the dedicated and discretionary expenses, it appears that are some changes they could make to address their goals of building an emergency fund of 6 months and starting to fund Becky's college fund.

One of the most important ratios at DFA is the savings because these funds are what fund future emergencies and goals such as college funding and retirement. In addition we tend to focus on the debt to income ratio as this includes unsecured debt such as credit cards. The importance of looking at this ration is that because some of the debt carries high interest charges, it can often be financially beneficial to pay down this debt as quickly as possible. We will first look at possible expenses to cut in order to channel money in other directions and then look at options for refinancing the home mortgage based on current interest rates.

Cash Emergency Fund

The Bedo's wish to have a six month cash emergency and based on the current ratio of 4.66 and are very close to achieving this. In order to achieve this goal you would need to accumulate $36,720 based on a monthly overall expense of $6,120. Since you already have $28, 500 in current funds, you would need to save an additional $8,220.

Option 1 Adjusting Expenses

Because there is a shortfall in expenses, meaning that you are spending more than what your income can support we would recommend making some adjustments to your spending.

We encourage looking at the expenses of charitable and gift giving. Charitable giving is something clients feel very passionate about so utilizing these funds often means weighing the priorities of goals. By reducing the charitable and holiday giving by 75% you will achieve an extra $6,600. In addition, as we will explain in more detail in the tax portion of this plan you also are overpaying your income withholding and you can allocate approximately $8000 to fund the increase in insurance and savings. As you build up your emergency fund over the next 5 years, the reduction in charitable giving can be offset by contributing actual physical time to local charities. As is noted in the tax portion of this plan, the 2018 tax reform will offer little benefit for charitable donations.

By continuing Mia's money market account (which she is willing to use in case of an emergency) this will accumulate another $1800 for the year which can be contributed to emergency fun.

In addition to your cash reserves and if you needed to extend beyond a period of 6 months, utilizing some of the personal investments may be necessary along with the utilizing the cash value of the two current whole life insurance policies. The total value of these policies would be approximately $17,100.

Option 2 Refinancing Home

One of the biggest changes that can reduce expenses and increase available cash is refinancing a home.

For this scenario we will assume a 3.0% cost for refinancing and will look at paying the 3.0% with current assets or wrapping it into the mortgage. We use two online refinance calculator to calculate the difference. Mortgage Calculator #1 Mortgage Calculator #2

Current balance on loan is $131,260 and 15 year fixed mortgage rate is 4.427%.

Using the online calculator and wrapping the 3% into the mortgage, the monthly payment would be $1,059 thus saving you about $29 a month and allowing you to pay off your mortgage approximately 5 years earlier.

If the closing fees are not wrapped into the mortgage but instead paid by current assets and utilizing a 15 year fixed mortgage the monthly payment would be $1029 a month. Again, this would allow the client to reduce the monthly mortgage and pay it off early.

Unsecured Debt (Credit Cards)

Because credit cards generally carry high interest rates, we recommend paying off these balances in a timely manner and then paying them off every month. In order to not continue to incur interest charges, it might be beneficial to utilize money in savings to pay off those balances. Currently there is enough money to pay them off but it would reduce your emergency fund.

DFA Recommendations

Based on the above scenarios, we would recommend refinancing your home and wrapping the closing costs into the mortgage. The advantage of doing this that you do not deplete your cash reserves and by refinancing with a 15 year fixed mortgage, you are paying off your mortgage almost 5 years early, thus saving close to $40,000.

We also recommend that you continue to fund Mia's money market account while reducing your charity and giving by 25% this year, but as we continue to reevaluate the goals you established, there may be the opportunity to increase charitable giving the following year.

Tax Analysis

At DFA we feel that taxes are often the most confusing aspect of the client/planner relationship so we try to make our analysis and recommendations as easy to follow as possible. In this section of the plan we will first review the current filing status of the clients and then show the current tax brackets. Calculating the tax then involves knowing all of the income and possible deductions. Based on the current information, we then make recommendations regarding tax reduction and often we will address tax deferment in the investing portion of the plan. Important Disclosure: This financial plan was not created or reviewed by a Certified Public Accountant (CPA) and all tax information and recommendation given in this section should confirmed by a CPA.

Filing Status and Assumptions

All following tax calculations will be based on a married filing jointly status.

- Federal tax bracket 25%
- State tax 5%
- Inflation 3%

Married Filing Jointly Taxable Income Tax Brackets and Rates 2017

Rate	Taxable Income Bracket	Tax Owed
10%	$0 to $18,650	10% of taxable income
15%	$18,650 to $75,900	$1,865 plus 15% of the excess over $18,650
25%	$75,900 to $153,100	$10,452.50 plus 25% of the excess over $75,900
28%	$153,100 to $233,350	$29,752.50 plus 28% of the excess over $153,100
33%	$233,350 to $416,700	$52,222.50 plus 33% of the excess over $233,350
35%	$416,700 to $470,700	$112,728 plus 35% of the excess over $416,700
39.6%	$470,700+	$131,628 plus 39.6% of the excess over $470,700

Federal Tax (2017)

Below we have reviewed all of your income, adjustments, and exemptions.

- Income (Earned)
  - Wages and bonuses $135,190
- Income (Unearned)
  - Interest $600
  - Dividends $3,520
- Above the line adjustments
  - Health Insurance $3,600
  - Retirement Contributions $7,529
  - Other (Disability) $300
- Itemized Deductions
  - Medical (240+600+240) = $1,080
  - State taxes=$6,266
  - Real Estate taxes= $1,675
  - Mortgage Interest =$10,379
  - Charitable Contributions= $5,800
  - Misc. Tax preparation = $400
  - Total Itemized deductions =$24,120
- Itemized deductions are greater than standard deduction.
- Exemptions
  - Personal and dependent $12,150 (2 personal exemptions and one dependent exemption)

Total Income	139,510
Minus above the line adjustments	(11,429)
Adjusted gross income	128,081
Itemized deductions	(24,120)
Exemptions	(12,150)
Taxable Income	91,811
Tax owed (using 2017 table above)	14,430
Tax paid for 2017	22,178

2017 Missouri State Tax

Utilizing the Missouri.gov tax calculator for 2017, we calculated that based on your taxable income, your Missouri tax would be $4,965. (Calculating in deductions and exemptions of $2800). You are currently paying $6,086 in state taxes.

2018 Tax Forecast

In 2018 there are set to be some significant changes to the tax calculations. To note are the changing brackets and standard deduction. The 2018 tax brackets are as noted below:

Married Filing Jointly / Qualifying Widow(er) 2018

Rate	Taxable Income Bracket	Tax Owed
10%	$0 to $19,050	10% of taxable income
12%	$19,051 to $77,400	$1,905 plus 12% of the amount over $19,050
22%	$77,401 to $165,000	$8,907 plus 22% of the amount over $77,400
24%	$165,001 to $315,000	$28,179 plus 24% of the amount over $165,000
32%	$315,001 to $400,000	$64,179 plus 32% of the amount over $315,000
35%	$400,001 to $600,000	$91,379 plus 35% of the amount over $400,000
37%	$600,001 or more	$161,379 plus 37% of the amount

Changes from 2017 to 2018

Based on the 2018 tax brackets, the tax rate will drop from 25% to 22%.

Along with the tax bracket changing, there are also significant changes with the standard deduction and personal and dependent exemptions. The standard deduction for married filing jointly is now $24,000 and there are no personal exemption amounts.

Based on these new changes, we anticipate that you will now utilize the standard deduction of $24,000 and you will not receive any personal exemptions. So we can see that after working the 2018 calculations based on 2017 income, you would end up paying about $200 more in federal taxes.

2018 Forecast Federal Tax Calculation

Total Income	139,510
Above line adjusments	(11,429)
AGI	128,081
Itemized deductions	(24,000)
Exemptions	0
Taxable Income	104,081
Tax owed (based on 2018 table)	14,667

Observations and Recommendations

After reviewing your tax information, it has come to our attention that the federal tax withholding for Tyler and Mia is well above the amount needed for federal taxes. The excess $9,000 can be returned to you as a refund. Because retirement funding can often be a concern, we recommend reducing your federal tax withholding by approximately $8,000 and utilizing those funds to pay additional insurance costs and build up your savings.

One consideration related to itemized deductions is reducing your charitable giving (this was also recommended in the Cash Flow portion of this portfolio). Reducing the charitable giving would allow you to build up your cash reserve and allow the standard deduction to be used for 2018.

Insurance-Personal

Life Insurance

Life Insurance is one of the most important components of a good financial plan and DFA helps clients make the best choices to make sure they are covered for life's events. While many workplaces offer their employees life insurance, it is often inadequate to cover expenses for the long-term and additional life insurance is necessary. At DFA we do a thorough review of our client's expenses and project those expenses into the future to give the client various coverage options.

Currently Mia and Tyler have life insurance coverage through their workplace and privately. Mia's coverage through work is a group term plan that is has a payout of 4 times her salary, and she also pays $80/month for a whole-life policy from Manhattan Insurance Company with a death benefit of $100,000. Tyler also has a group term policy through his employer with a death benefit of 1 times his salary (not including bonus). Tyler also pays $92/month for a whole-life policy from Manhattan Insurance Company with a death benefit of $100,000. Both of the whole life policies held by Mia and Tyler earn an after-tax rate of return of 5.50%.

For both Mia and Tyler we calculate two different approaches for insurance needs. The first being the Human Life Value Approach and the second being the Capitalized Earnings Approach.

Assumptions for calculating the various approaches are:

- Rate of inflation: 3%
- After-tax rate of return on investments: 3.7% (conservative return)
- Monthly expenses: $6639
- Tuition percentage increase: 5% yearly
- Salary increase: 3%
- Tax bracket: 30% currently, 25% anticipated at retirement
- Monthly needed income for Needs Analysis based on $73,392 after tax income from Tyler=$6,116/month (Calculations for 4 periods: Period 1- Until Becky is 18, Period 2-Mia age 55-60, Period 3- Mia age 60 to 67, Period 4- 67-95
- Income multiplier:
  The multiplier is based on the income generated by Tyler and Mia and how much of the income they expend. So after taxes they bring in about $7,975 (based on $95,000/year) and spends about $6600. So the multiplier would be 6600/7975=.828 so 1/ (1-.828)=5.81 rounded up to 6
- 20 years for WLE (work life expectancy)

Human Life Value Approach

The Human Life Approach is used to calculate future income stream and then discount it into present dollars along with taking into account expenses and taxes. (Dalton J. F., Dalton, Langdon, & and Gillice, 2015) All calculations found in the Appendix.

Tyler Insurance needs for Human Life Value Approach = $1,235,355.00

Mia Insurance needs for Human Life Value Approach= $373,394

Capitalized-Earnings Approach

This approach is similar to the human-life value approach except that the work-life expectancy and the investment returns of the life insurance are at the long-term investment rate. (Dalton J. , Dalton, Langdon, & Gillice, p. 106)

Tyler Capitalized-earnings Approach = $1,761,272

Mia Capitalized-earning Approach = $562,968

Current Life Insurance Coverage and Recommendations

Tyler: Work and Personal Coverage= $168,466

Mia: Work and Personal Coverage= $229,984

After reviewing the needs analysis, it is evident that Tyler is overwhelmingly under-insured and would benefit from getting increased coverage as soon as possible. For the additional coverage we would recommend a 20 year term policy valued at a minimum of $1,000,000. This will cost about $1,160/year. (Rose, 2018)

Adding this policy will negatively impact your monthly income and increase your expenses, but will be the most economical way of having better coverage.

Mia's insurance needs are not as great as she is closer to the analysis. For her we would also recommend a 20 year term policy for $100-250,000. The cost for $250,000 policy would be about $300/year. (Lalor, 2018)

Health Insurance

For health insurance, Tyler's work provides a health insurance policy that costs $300/month with an annual deductible of $450 and stop-loss of $3,000. Doctor visits cost $20 and $40 for a specialist and a $100 copay for emergency treatment. There is no lifetime ceiling for benefits. Not included in the insurance are dental and vision services. Currently, there is about $50 per month put aside for those expenses. There is an FSA available but is not funded at this time.

Recommendations for Health Care

Tyler has a good plan for his work and the one thing he could utilize is funding his FSA. While he does not want to lose money, he can be conservative and fund a minimum of $50-100 a month as with children they will probably go see the doctor a number of times throughout the year. The FSA is also beneficial as a way of reducing taxes as they are taken out pretax. Tyler and Mia may also want to look at adding a dental and vision plan. Currently those plans for a family of three runs about $100-130/month. (Refer to quote from Humana in Appendix). This would increase your yearly expenses by $1200-$1,560.

Disability Insurance

For disability insurance, both Mia and Tyler have policies through their workplace. Both have short and long-term coverage and Mia pays an additional $25/month for short-term disability. For Tyler and Mia, the short-term insurance has 100% payments while Mia's long-term has 70% and Tyler's has 60%.

Disability Insurance: Currently, the only out-of-pocket cost they have for short and long-term disability insurance is $25/month for Mia's long-term insurance.

The shortfall for a short-term disability would be $195 if Tyler were disabled and a surplus of $700 if Mia were disabled.

For a long-term disability, the short-fall would $2,329 if Tyler were disabled and a surplus of $193 if Mia were disabled.

Recommendation for Disability Insurance

Since the disability insurance they currently have is covered through work with probably no portability, you may both want to purchase long-term disability insurance that is not connected to your employer. If one of you were to lose their job and become disabled they would at least have some long-term disability coverage.

Since the short-term disability shortfall is minimal it can probably be covered by current cash reserves and does not necessitate an increase in short-term coverage. We would recommend however, bumping up the coverage of long-term insurance for Tyler to cover the additional $2,329 shortfall incurred if Tyler had a long-term disability. Minimally he would want at least $2,000/month extra coverage and at most would need $2,500/month coverage. An estimate from Mutual of Omaha puts that at an extra $27-$40/month with no riders. (Disability Income Insurance, 2018) DFA would recommend including the Cost of Living Adjustment Rider and perhaps a Future Insurability Option.

Long-Term Care Insurance

Long-term care provides coverage for individuals as they become older or incapacitated by illness. As medical expensed continue to rise, this insurance alleviates the need to use financial resources allocated for other areas and assures peace of mind for surviving family members.

Assumptions

- Nursing home expense- $49,000 per year
- Avg. age of entering assisted living facility: 75 years old with length of stay being 2.5 years
- Avg. age for entering nursing home: 83 years old with average stay of 1.5 years
- A more updated figure for Missouri in 2017 would be the following (from Mutual of Omaha website):

- Home health aide: $63,354/year
- Assisted living Facility: $48,017
- Nursing home: $60,210

Currently youhave no long-term care insurance and are at an age where they could wait a little bit before considering it. DFA recommends enrolling in long-term care insurance around age 55. While you are eligible for SSI benefits at age 67, the funding for SSI may be limited so a more realistic assumption is that you will have available income from your retirement investment portfolio. While you may have enough to cover a specific number of years of long-term care, you may not be able to have a high quality level of care or leave much of their estate to their daughter or other family members. In considering the purchase of long-term care, starting now would lower their monthly premium. On the basis of needing around $4,000/month for current nursing home care, Tyler and Mia should enroll together to get a partner premium allowance. Referencing the Mutual of Omaha website, for Tyler the monthly payment would be about $37 and for Mia it would be $57.   Based on the information from Mutual of Omaha, they received an A+ rating from the A.M. Best Company. (Long-Term Care Insurance, 2018)

Property and Casualty Insurance

At DFA, we review the property and casualty insurance of our clients and make recommendations based on risk management. Our motto on insurance is that "it is better to have it a not use it, than to need it and not have it."

Currently Mia and Tyler own two cars: a 3 year old Ford Taurus and a 5 year old Nissan Quest Minivan. Your home is currently worth $225,000 and you have some personal property that is valued quite highly. This includes yard equipment, jewelry, signed golf club, sporting equipment, artwork, and a boat. In reviewing your coverage, we will first look at your auto insurance and then property and liability insurance.

Automobile Insurance

For automobile insurance you are currently covered by Missouri Valley Insurance Corporation (A.M. Best Rating:A).

Details of coverage

- Split-limit coverage of 100/300/50
- 100,000 of uninsured/underinsured motorist coverage
- Deductible of $500 for comprehensive
- Deductible of $500 for collision
- The insurance also covers medical payments, car rental, and towing.
- Cost for coverage for both cars is $2000 per year

We believe the coverage is sufficient for both vehicles but you may be paying a little too much for insurance. An online quote from Progressive Insurance with similar coverage came in at about $138/month ($1656/year) with an address in Springfield, Missouri. (Progressive Car Insurance Quote, 2018) You have a separate company for property insurance so may benefit by having all of your policies with one company and get a discount for bundling. If you wanted to reduce the premium even more you could increase the deductible to $1000 for each car. At minimum, this would decrease your expenses about $340 a year and since insurance changes are fairly common, timing would dictate that this happen as soon as is convenient. One thing to factor in to the decision of changing insurance carries is the level of service a customer receives. It is often hard to put a value on this and needs to be weighed critically by the client.

Property and Liability Insurance

Currently you have a homeowner's policy with HO-3 coverage through Missouri National Insurance (A.M. Best rating:A) and the home is insured for $225,000 with a deductible of $500 and $100,000 liability limit. There is also an umbrella policy of $500,000. With the homeowners insurance and umbrella policy the yearly cost is $875/year.

In comparison to a similar valued house and similar coverage without the umbrella, State Farm Insurance would cost about $1,032. (State Farm Home Insurance Quote, 2018)

H0-3 coverage entails the following coverage:

- Coverage A:Dwelling
- Coverage B: Other Structures (detached)
- Coverage C: Personal Property (Tangible Personalty- Moveables)
- Coverage D: Loss of Use
- Coverage E: Personal Liability ($100,000 limit)
- Coverage F: Medical Payments to Others

In addition to the H0-3 coverage we would also recommend bumping the insurance coverage up to $250,000-$300,00 and adding the Replacement Cost for Personal Property endorsement, Inflation Protection Endorsement, and Sewer Backup Endorsement(depending on condition of sewer pipe and if there have been previous backups). Also, since they receive heavy rains, flood insurance may be available and you might want to purchase it depending on the risk.

Since there is some property that is hard to value, you should get a professional appraisal for the artwork, signed golf club, and jewelry and keep the paperwork in a safe place and submit it to the insurance company. Regular appraisals should also be scheduled as prices can fluctuate dramatically and we want to make sure the full value of the items is insured.

The umbrella policy currently held for $500,000 is sufficient but because the personal liability umbrella policy (PLUP) is generally inexpensive, we recommend increasing the amount covered to $1,000,000 which tends to be the industry minimum. Upgrading to this level will be around $300. Most PLUPs do contain exclusions such as "damage to insured's property, injuries sustained by the insured or a family member, injuries that were intentionally inflicted or caused by the insured, injuries to another party that should be paid under a workers compensation law, and business and professional liability incidents." (Dalton J. , Dalton, Langdon, & Gillice, p. 312)

Boat Insurance

Because the boat is valued above $5,000 a separate boat owner's policy might be something to consider so it has its own coverage. Typical boat coverage can cost between $300-$500/year. (Boat Insurance Cost, 2018)

Summary of recommendations:

- Bundle insurance carriers into one for savings up to 20%
- Add Replacement cost of personal property endorsement and inflation protection endorsement
- Purchase boat insurance
- Appraisal and paperwork for golf club, jewelry, and artwork
- Increase Umbrella policy to $1,000,000

Total Cost of insurance

Using Progressive and State Farm with no bundling and adding boat insurance with no additional endorsements, cost for insurance would be approximately: $1656 (auto)+ $300 (boat)+$1032 (homeowners) + $300 (umbrella policy) =$3,288/year. By bundling your policies, this would drop the cost down by a maximum of 20% and put your property and casualty insurance at around $2,631. (Wong, 2015). This is about $200 less than what is currently being paid ($2,875).

Non-Retirement Needs and Investment

At DFA, investing for special needs takes special consideration and while many of these investing tools are similar to retirement savings, often the time frame for accumulating the wealth is much shorter and thus must take in different considerations. In the first section of this analysis we will look at funding options for Becky's college education. In the second part of this analysis we will look at your personal investments not connected to college funding. Previously, both Tyler and Mia completed an Expectation and Satisfaction Questionnaire and a Clients Investment Attitude Questionnaire and together these two surveys help us formulate our recommendations.

College Education

One of the main goals for both of you is to fully fund Becky's college fund by the time she starts college at 18. Fortunately there are many avenues but you expressed the interest to take advantage of any tax deferral programs available so we will be looking at four main options: Missouri 529 College Savings Plan (MOST), the Coverdell Education Savings Account (CESA), Roth IRA, and EE Bond conversion.

Assumptions

- Universal rate of inflation: 3%
- Prime interest rate: 3.25%
- In-state tuition at private college:$20,000/year
- Tuition cost increase/year= 5%
- Moderate aggressive investments (as per Bedo questionnaire)
- Becky will start college 13 years
- No assets currently allocated for college
- 4 years to complete college
- Effective annual after tax rate of return for moderate aggressive rate: 7%
- Cost of college tuition for all four years needed at first year of college = $162, 545
- Total cost needed in present value dollars: $67,450
- Monthly savings needed to meet education goals: $659/month (see all financial calculations in Appendix)

Section 529 Savings Plan

Advantages:

- In Missouri, state tax deduction up to $16,000 for married filing jointly status
- No state or federal tax on money withdrawn for qualified expenses
- State and federal taxes are deferred
- Various levels of investments
- Can be used for K-12 expenses
- Can use funds for any accredited college, even out of state)
- Can transfer account

Disadvantages:

- The beneficiary may decide not to attend an accredited college or even attend college
- Investments are tied to market (potential for funds to be less than expected)
- Selection of funds is chosen by plan
- Limited number of asset allocation changes per year (usually only 1)
- Can increase EFC for Financial Aid calculations

Coverdell Education Savings Account (CESA)

Advantages

- Distributions are tax free
- Can be rolled over into a 529 plan
- Hope Credit or Lifetime Learning Credit can be claimed for qualified expenses

Disadvantages

- Client income may exceed threshold limits
- $2,000 annual savings cap
- Income limitations: $220,000 Married Filing Jointly
- Must be used by child's thirtieth birthday or reassigned, otherwise 10% penalty on earnings

Roth IRA

Advantages

- Primary goal of retirement but can be used to pay college expenses
- Contributions of fund for college expenses can be used tax free (fund must have been opened for 5 years)
- Funds can be withdrawn from individual account at age 59.5 with no tax penalty

Disadvantages

- Not recommended for funding entire education, more useful for retirement
- Can deplete retirement funding, sometimes prolonging retirement plans
- Penalties can apply if not properly monitored
- Not sufficient as a standalone means of funding college

Series EE Bonds

Advantages

- Can be cashed in tax free
- Must be cashed in to pay for college tuition
- Can contribute up to $30,000 yearly for married clients

Disadvantages

- Income limitations
- Must be planned well in advance
- Can increase EFC for financial aid calculations
- Only used for postsecondary institution

Other Considerations

As college tuition continues to increase, it is important to understand that there besides fully funding Becky's college education there are other factors that can reduce the cost of college. These can include scholarships, work study, grants, and student loans. Looking at one private college in Missouri, College of the Ozarks, their current tuition is $28,476 and for students with a household income of $75,001-$110,000 the average cost after aid is $13,933. (College of the Ozarks, 2018)This is significantly lower than the advertised cost and seems fairly consistent throughout other private institutions in Missouri. It may mean that Becky carries some of the burden of her education but according to an article in Inside Higher Education, working while in college offers many benefits for the student such as building skills, more ownership of education, and financial management. (Roelofs, 2016)

Recommendations

Our first recommendation would be to sell the EE bonds you currently hold worth $25,000 and shift them into a MOST 529 Education Savings plan. In order to make this happen, the bonds must first be sold and then deposited into the 529 plan within 60 days allows the money to avoid being taxed. Because you need a Present Value sum of $67,450, this would drop the need down to $42,450. This would reduce the monthly savings expense down to $415.00. In order to fund the $415 monthly 529 deposit, we would recommend cutting back the contributions to the Sagebrush, Haley, and Ruth funds (or suggested alternate funds) by $150 each/month. This frees up $450 to then be invested in the 529 plan.   Reviewing the funds offered in the MOST 529 plan, we would recommend utilizing the Vanguard Total Stock Market Index Portfolio, Vanguard Growth Portfolio, and Vanguard Conservative Portfolio.

Utilizing a balance of 50/30/20 respectively, would bring the average rate of return for your portfolio to 9.12% which we feel is a realistic assumption.

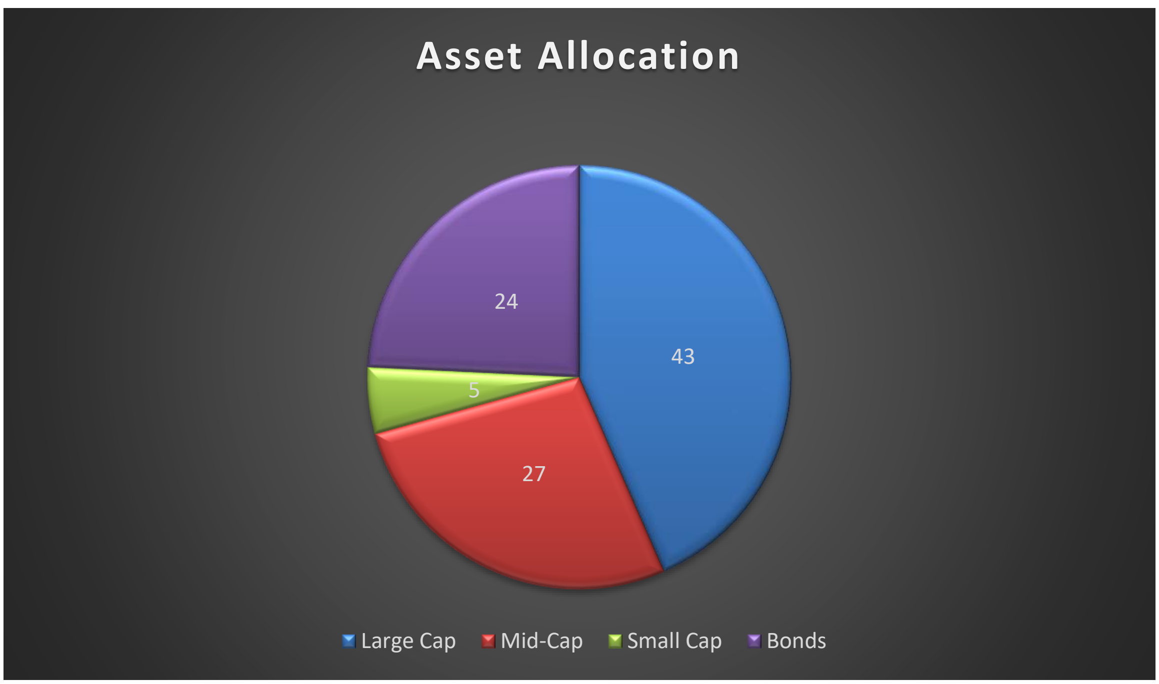
In addition to funding a 529 plan, we believe that establishing a Roth IRA would also be advantageous as it will help build your retirement fund and if needed can be used to supplement college costs. We will be addressing the opening a Roth IRA in more detail in the Retirement portion of this plan.

Non-retirement Investments: Art Gallery and Home Addition

In this section, we analyze your current investments that are not related to your retirement accounts. One of the goals that was established was that Mia wanted to be able to open her own art gallery in retirement and by adjusting some of the current funds, we anticipate this will help achieve that goal. After moving the EED bonds to a 529 Savings Plan, the remaining balance of $133,000 can be used to fund the art gallery and house addition. The advantage of still having a significant amount of time before needing the funds allows you to be a bit more aggressive with those funds. With the working assumption of a moderately aggressive portfolio earning 10%, at age 60, these funds will be worth approximately $739,000. Additionally, these funds can still be utilized in the case of an emergency. As can be seen in the charts below, we have outlined your current assets and also illustrated how your portfolio would change based on our recommendations. Your current nonretirement investments are:

Description	Owner	Market Value	Current Yield
Misc. EE Bonds	Joint	$25,000	3.50% deferred
Haley G&I Fund	Joint	$69,000	3.2%
Konza Fund	Joint	$43,000	1.75%
Ruth Fund	Joint	$13,000	4.00%
Sagebrush Fund	Joint	$8,000	0.50%

Current Allocation



Total value of all funds=$158,000

Previous recommendation of moving EE funds to MOST 529 Savings Plan leaves $133,000 available funds.

At DFA we utilize the following funds to form a client's portfolio.

Equity Funds

Fund	Investment Style	Before-tax Rate of Return	Standard Deviation	Correlation with Equity Market	Yield
Value Fund	Large Cap	9.00%	12.00%	0.95	3.00%
Growth Fund	Large Cap	10.20%	15.00%	0.90	2.00%
Eastside Fund	Mid-cap	8.40%	10.00%	0.92	2.00%
Konza Fund	Mid-cap	9.20%	13.00%	0.91	1.75%
Sagebrush Fund	Small-cap	11.20%	21.00%	0.80	0.50%
Rocket Fund	Small-cap	14.00%	22.00%	0.75	0.00%
Consumer Fund	Small cap	8.75%	11.00%	.99	2.50%
Acquisitions Fund	Mid-cap	7.50%	5.20%	0.20%	4.00%
International Fund	International EAFE Index	10.00%	11.20%	0.50	2.00%
Haley G&I Fund	Large Cap	8.00%	10.00%	0.90	3.20%
Graham Fund	Real Estate and Precious Metals	4.10%	12.00%	0.10	2.00%

Bond Funds

Fund	Investment Style	Before-tax Rate of Return	Standard Deviation	Correlation with Bond Market	Yield
Ruth Fund	Govt. Bond	4.80%	4.90%	0.85	4.00%
Cardinal Fund	Corporate Bond	5.20%	5.10%	0.90	4.80%
Clock Fund	Corporate Bond	6.00%	6.20%	0.98	5.40%
Ely Fund	Govt. Bond	6.10%	6.05%	0.92	6.00%
Companion Fund	High Yield	7.00%	13.00%	0.80	6.10%
States Fund	Govt. Bond	5.70%	6.00%	0.75	4.00%

Barrister Fund	Money Market	3.00%	0.00%	0.00	3.00%

Working Assumptions for Portfolios

	Expected Before-tax Total Rate of Return	Estimated Target After-tax Total Rate of Return	Beta (Indexed to S &P 500)	Standard Deviation
Conservative	5.25%	3.7%	<0.40	<7.0
Moderately Conservative	7.75%	5.4%	<0.80	<9.0
Moderately Aggressive	10.00%	7.0%	0.80<1.00	<13.0
Aggressive	12.14%	8.5%	>1.00	>13.0

Key Terms

Beta: "Beta is a measure of the volatility or systematic risk, of a security or a portfolio in comparison to the market as a whole. A beta of 1 indicates that the security's price moves with the market. A beta of less than 1 means that the security is theoretically less volatile than the market. A beta of greater than 1 indicates that the security's price is theoretically more volatile than the market" (Beta, 2018)

Standard Deviation: "The standard deviation essentially reports a fund's volatility, which indicates the tendency of the returns to rise or fall drastically in a short period of time. A volatile security is also considered higher risk because its performance may change quickly in either direction at any moment. The standard deviation of a fund measures this risk by measuring the degree to which the fund fluctuates in relation to its mean return." (Carther, 2018)

Yield: "is the income returned on an investment, such as the interest received from holding a security. The yield is usually expressed as an annual percentage rate based on the investment's cost, current market value, or face value. Yields may be considered known or anticipated depending on the security in question as certain securities may experience fluctuations in value.

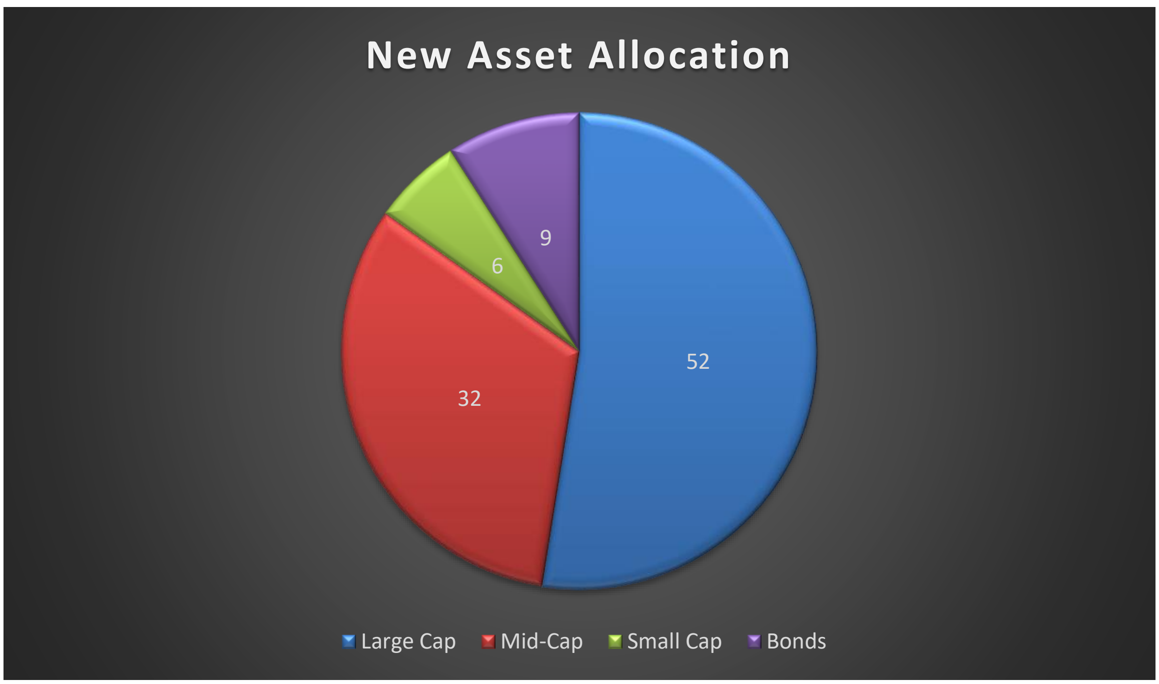
Yield is forward-looking. Furthermore, it measures the income, such as interest and dividends, that an investment earns and ignores capital gains. This income is taken in the context of a specific time period and then annualized, with the assumption that the interest or dividends will continue to be received at the same rate." (Murphy, 2018)

Return: "is the financial gain or loss on an investment and is typically expressed as the change in dollar value of an investment over time." (Murphy, 2018)

Recommendations

Because there is still a fairly large amount of time before the money is needed for Mia's art gallery, we would recommend shifting some of the investments into more aggressive funds. After moving the EE bonds into the 529 plan, we want to look at the remaining funds and reallocate some of them to obtain a better yield. The Sagebrush Fund has a standard deviation of 21% and would be considered a higher risk and a very aggressive fund. Based on the survey Tyler and Mia completed, allocating these funds to a less aggressive fund would be advisable such as the Consumer Fund. In addition, a less aggressive fund can produce a better yield. We recommend not changing your Haley Fund as it a large-cap fund and is aggressive but follows closely with the market. Keeping the Ruth Fund puts a portion of your allocation into bonds and you still maintain a fairly high bond yield while offering lower risk. Lastly we want to look at the Konza fund which is a moderately aggressive fund with a standard deviation of 13% and yield of 1.75%. We would recommend another moderately aggressive fund with bit higher yield such as the Eastside Fund.

New Asset Allocation



We feel this new allocation will better suit your needs and address your risk tolerance. As with all DFA investments, we will continue to monitor the progress of these funds and during our client meetings, we will evaluate their performance and any recommendations we may have.

Retirement Income Needs and Investments

At DFA, we feel retirement planning is one of the most important components of a good financial plan and because it often spans decades, it is important to re-analyze retirement goals. Along with workplace savings, other vehicles such as Social Security, IRAs, and personal investments can also contribute to accumulating sufficient retirement funds. Retirement should be a time for clients to focus on what is important in their lives and with clear guidance should have the financial means to participate in those activities. Utilizing tax advantaged financial vehicles are our main focus at DFA and we address these options in this section.

As noted in the Retirement Survey completed by the Bedos, the following items should be considered:

- Maintain comparable standard of living
- Invest in personal health
- Allow for Tyler and Mia to pursue interests (golf/art)
- Spend time with family
- Passing of wealth (estate planning)
- Ability to leave workforce on own timeline

Social Security

Mia and Tyler would both like to retire early at age 62 and believe they will be able to live on 85% of their current before tax earned income. Both Mia and Tyler were born in 1976 and will be eligible for full Social Security benefits at age 67. Retiring any time before 67 will see a reduction in benefits while retiring at age 70 will see a 24% increase in benefits. For example, retiring at age 62 would see benefits at 70%. Currently the benefits for Mia and Tyler are as follows utilizing the online calculator from the IRS website:

Tyler Retirement Age	Year	Monthly Benefit current	Monthly Benefit in Future dollars
62	2038	2,027	4,217
67	2043	2,976	7,108
70	2046	3,399	8,891

Mia Retirement Age	Year	Monthly Benefit Current	Monthly Benefit in Future dollars
62	2038	1,015	2,099
67	2043	1,497	3,573
70	2046	1,716	4,501

Medicare

Medicare insurance is also something the Bedos will be eligible for and comes in the form of Original Medicare (Part A and B), or a Medicare Advantage Plan (Part C), and Prescription Drug Coverage (Part D). Once a client get closer to being eligible for Medicare, DFA will help them evaluate the best options.

Account Options for Retirement (Tax-Advantage Accounts)

Because taxes play a large role in accumulating wealth for taxes and other uses, DFA tries to position funds in tax advantaged accounts. Often, employer workplace savings such as 401(K) plans offer employees the opportunity to do this with minimal effort. In this plan, we will look at the three most common options for tax savings: The 401(K) plan, The Roth IRA, and the traditional IRA.

401(K) Plan Features

- Tax deferred account
- Employee can contribute up to $18,000 with catch up contribution at age 50 of additional $6,000.
- Employer often matches a certain percentage of employee's contributions with make matching at 25%.
- Required minimum distributions (RMD) at age 70.5.
- Penalties can be incurred if money is withdrawn early
- Withdrawals can begin after age 59.5.
- Taxes are incurred upon distribution

Roth IRA Features

- Earnings grow tax-free
- Income limitations ($135,000 for single filers and $199,000 for married filing jointly)
- Maximum yearly contribution of $5,500 unless over 50 which is $6,500
- No required minimum distribution
- 15 months to contribute for tax year (Jan.1, 2018-Apr. 15, 2019)
- Qualified distributions may begin 5 years after opening account

Traditional IRA

- Contributions may be fully tax deductible if they fall within the (2018) income limits of: $101,000 married filing jointly or $63,000 single or head of household filer.
- Annual contribution limit of $5,500 or $6,500 if over 50.
- Distributions can begin at age 59.5
- At 70.5 contributions can no longer be made and RMD must be taken
- Earnings grow tax deferred
- At distribution, contribution and earnings are taxed as ordinary income

Retirement Income

At DFA we try to anticipate all of the variables needed to calculate a client's retirement needs and based on our discussion and the retirement survey we have developed the following assumptions:

- Partial SS benefits can begin at age 62
- Full Benefits begin at age 67
- Desire to retire at age 62
- Inflation rate: 3%
- Marginal tax rate at retirement will be 25%
- Wage Replacement Ratio (WRR) of 85%
- Addition on home for art gallery or $20,000

- Small art gallery at cost of $80,000
- Increase of 3% to retirement accounts each year
- Life expectancy is 95 for Tyler and Mia
- Expected rate of return for moderately conservative accounts before retirement is 7.75
- Expected rate of return for conservative accounts after retirement in 5.25%

Current Fund Contributions

Tyler's Workplace Investments	Current Value	Tyler's Contribution	Employer Contribution
Consumer Fund	$69,000	3% of base Salary	0%
Graham Fund	$134,000	3% of base Salary	3%
Mia's Workplace Investments			
Rocket Fund	$15,250	10% of Salary	3% (50% match on first 6%)

Additional Retirement Assets held outside of Employer

Fund Description	Owner	Market Value
Traditional IRA CD	Tyler	$52,000
Rollover IRA Ruth Fund	Mia	$32,500
Traditional IRA CD	Mia	$52,000
Conservative annuity Potsdam Fixed Annuity	Mia	$125,000

Capital Needs Analysis

Because Tyler and Mia want to retire at age 62, we did a Capital Needs Analysis using the Annuity Model and the Capital Preservation Model to determine the annual savings needed to retire at this age. The annuity model is based on the assumption that you will have enough money at the beginning of retirement to last until death whereas the Capital Preservation model assumes that the client will have the same balance at the end of their life as they did at the beginning of retirement. Below, DFA has worked through both scenarios.

Annuity Model of Capital Needs Analysis

Step 1: Determine funding amount in today's dollars		
	$135,194	Salary
	85%	WRR
	$114,914	Total needs in today's dollars
	$36,504	Less Social Security in today's dollars (age 62)
	$78,470	Annual amount needed in today's dollars
Step 2: Inflate needs from Step 1 to beginning of retirement		
N	20	62-42 WLE
I	3.0	Inflation
PV	78,470	Retirement needs in today's dollars
PMT	0	Not applicable for this calculation
FV	$141,725	First year needs for retirement
Step 3: Determine the funding needs at retirement age		
N	33	95-62 RLE
I	5.25	conservative rate
FV	0	
PMT	$141,725	From Step 2
PV	$2,200,687	Total need for retirement at age 62
Step 4: Determine the required annual savings amount		
FV	$2,200,687	From Step 3
N	20	62-42
I	7.75	Moderately conservative rate
PV	$479,750	Current balance in retirement accounts
PMT	$1,480	Yearly annual savings needed

Capital Preservation Model of Capital Needs Analysis

Capital Preservation Model	
N	33
I	5.25
FV	$2,200,687
PMT	0
PV	406,675+2,200,687=$2,607,362
Calculate Annual Savings needed	
N	20 (62-42)
I	7.75
PV	479,750
FV	2,607,362
Annual Savings needed to retire at age 62	$10,615

Current annual retirement savings from Employer programs and non-employer programs is approximately $13,373 (Tyler-$6,161, Mia- $4,212, Mia's Annuity- $3,000.)

Observations and Recommendations

Both Tyler and Mia should be commended on your focus on saving for retirement and because of that you may be able to retire at age 62 although you will receive reduced Social Security benefits. Due to the large number of assumptions, in particular the market assumptions, it is important to closely monitor retirement savings as often, clients are required to adjust certain assumptions or delay retirement. As a point of comparison we have done another look at your retirement scenario by analyzing a retirement age of 67 for both of you as this is when you would both receive full benefits. (Please see Appendix)

In addition to what you are currently saving, we feel there are some changes that could occur to take more advantage of tax deferral growth, one of which would be to open a Roth IRA account. We recommend this because Federal tax policies can change as the nation changes political leaders, having a Roth IRA diversifies your tax risk. You currently have various traditional IRAs which are tax deductible but the Roth offers the advantage of having your earning be tax-free as long as distribution rules are followed. As noted above, each individual can contribute up to $5,500/year into a Roth IRA account. In order to begin funding this account either under one or both of you, we need to look at where the money can be reallocated. For this allocation, we would recommend you stop funding Mia's fixed annuity account and divert the monthly

$250 into a Roth IRA account. We would recommend investing these funds in the Growth Large Cap Fund as it closely follows the equity market and allows Mia to accept a little more risk while not investing a large one-time amount and spreading the contributions over decades. As previously mentioned, the Roth IRA can also be used to fund education expenses but we would recommend utilizing the Roth for those purposes as a last effort.

We would also recommend continuing to fund their workplace 401(k)plans as this money grows tax deferred until they retire. We would also suggest Tyler diversify his 401(K) holdings a bit more as he has a significant amount in the Graham Fund which is a Real Estate and Precious Metal Fund and does not closely follow the equity market. Reallocation to a mix of large, mid, and small cap funds will lower the risk that can often come with real estate and precious metals although keeping some funds in that account are warranted. Our allocation recommendation for both of Tyler's funds would be 30% Large Cap, 20% Mid-cap, 20% Small Cap, 20% Real Estate/metals, and 10% Bonds. DFA offers various options for these allocations and can be discussed if this recommendation is accepted. For Mia, we would recommend she also diversify her funds and instead of funding the Rocket Fund completely we would recommend a bit more aggressive distribution of 50% large cap, 20% mid-cap, 20% small-cap, 10% international fund. Beta analysis can be found in the Appendix.

In regards to the addition and art gallery projects for Mia, we would recommend utilizing the funds available from the non-retirement investments mentioned in the previous sections. Additionally, any income earned from Mia's gallery will help supplement retirement funds along with building equity in owning the store.

By using the Capital Preservation method of retirement savings and continuing to save above the recommended amount, the Bedos will be able to leave Becky a sizable estate at their death.

Estate Planning

DFA prides itself on being a full-service Estate Planning Company. We define estate planning as accumulation, preservation and distribution of a client's assets. The accumulation phase of the process is making sure a client is invested correctly along with taking advantage of tax benefits. The preservation phase most often occurs during retirement and the objective is to maintain wealth in order to pass it to the next intended party after death with entails the distribution phase. Often the goals and objectives of estate planning are fulfilling healthcare decisions, fulfilling property transfer wishes, liquidity at death, minimize transfer tax, maximize net assets to heirs, and minimize transfer costs. (Dalton M. A., 2016)

The Bedo's Current Situation

When Becky was 2 years old Tyler and Mia completed a will that was a kit from an office supply store and indicated via the intake interview that it was hurriedly completed. In the will it indicated that if both of them were to pass, Mia's sister Barbara would become Becky's legal guardian. In the case of only Tyler or Mia passing away, the assets would be passed to the surviving spouse. Since completing the will, there have been no updates. In addition, privacy is a concern and they would like to avoid probate and in order to pass on as much wealth as possible, they would like to avoid estate taxes.

Based on our retirement calculations, the Bedos should be able to pass on a substantial amount of wealth to Becky and desired charities. While much of the wealth will be from financial investments such as mutual funds, retirement accounts, IRAs, and bank accounts, there will also be some assets such as artwork, home, business, sports memorabilia and jewelry. In order to understand how to avoid probate we will first explain what and what does not pass through probate and then offer some recommendations of how to position assets in order to not pass through probate.

Probate Process

"The probate process is the legal process through which the decedent's assets that not automatically transferred to their heirs by contract or law are retitled in the name of the heirs." (Dalton M. A., p. 104)

Because probate can be time consuming and costly along with exposing financial information to the public, it is important to understand what passes through probate and what does not. Assets that generally do not pass through probate are retirement accounts such as IRAs or 401(k) plans (assuming a beneficiary was named), life insurance proceeds, payable-on-death (POD) accounts like savings and checking accounts, and property held in a living trust. Assets that can pass through probate are solely held assets, personal property such as collectibles, autos, jewelry, and real estate.

Estate Tax and Gift Tax

Missouri does fall under the estate and gift tax and for 2018 for married couples the amount a couple can pass to heirs without incurring a tax is $11.2 million while the annual gift exclusion has risen to $15,000 per person. One important caveat to note is that with new federal administrations, these exclusions can change although due to inflation, they tend to trend upward.

Calculating the Estate

Utilizing an abbreviated estate tax formula, the following allows gross estate tax to be calculated.

Total Gross Estate Less Exclusions		________________(Gross Estate)
Less: Tentative Total Allowable Deductions		_________________
Equals: Tentative Taxable Estate	_____________	
Less: State Death Tax Deduction	_____________	
Equals: Taxable Estate		__________________
Plus: Adjusted Taxable Gifts		__________________
Plus: Tentative Tax Base		__________________
Equals: Tentative Tax		__________________
Total Gift Tax Paid or Payable		__________________
Gross Estate Tax		__________________

(Dalton M. A., p. 191)

Estate Planning Documents

In this section we will briefly describe the main documents that factor into estate planning.

- **Will**: Statutory will drafted by attorney and in accordance with state of domicile
- **Side letters of instruction**: details testator's wishes regarding disposition of specific tangible possessions as well as funeral and burial wishes.
- **Powers of Attorney for Property**: allows agent to manage a principal's property and finances
- **Durable Powers of Attorney for health care** (also called medical power of attorney): legal document that appoints an agent to make health care decisions on behalf of a principal who is unable to make those decisions.
- **Living wills or advance medical derivatives**: legal document expressing a principal's last wishes in regards to sustainment of life under specific circumstances.
- **Do not resuscitate orders**: A document that states a principal does not want to have CPR performed in the case of their heart stops beating. (Dalton M. A., 2016)

Recommendations

Our first recommendation for Tyler and Mia would be to update their existing will through either an attorney at DFA or through an attorney of their choice. If there are any changes to guardian status you will want to include this information along with providing an alternate guardian in the case that the primary guardian is unable to carry through with the duties. Along with designating guardians, Tyler and Mia should also appoint an executor of the will so their wishes will be carried out as documented. This action should occur as soon as possible. Cost will be around $1500.

Our second recommendation would be to update and review all of their current beneficiary designations. As mentioned above, many of the assets do not need to pass through probate but it is important that all beneficiaries are updated and in most cases will either make Tyler or Mia the primary beneficiary and Becky the secondary beneficiary. This process is best done by creating a list of all assets that utilize a beneficiary form and either updating them independently or together with one of our planning interns. We would also recommend that life insurance policies take priority in this process.

Our third recommendation would be to create a revocable living trust. The main purpose of this trust is to avoid probate. A revocable trust would be managed by Tyler, Mia or jointly and would be for the benefit of their lifetime. Any property transferred to the trust avoids the individual's probate estate but is still included in the individual's gross estate. We would recommend that items such as real estate (house), collectibles, and artwork be placed in the trust. If in the future, Mia were to buy and open an art gallery, this too should be included in the trust. Because a trust is created by an attorney, this fee generally runs from $1,000-$2,000 and the trust should be reviewed any time there are large assets acquired.

Our fourth recommendation would be to appoint a power of attorney and durable power of attorney for health care. Both of these orders would put into place a person to make medical and financial decisions if either one or both of the you were unable to do so. We would recommend that Mia and Tyler each designate the other spouse and is often the case as people age, these powers are often transferred to a child.

Our fifth recommendation would be to establish a living will, medical directive and do not resuscitate order for Tyler and Mia. In consultation with your physician, these orders assure that your medical wishes are followed in the event that you can no longer make those decisions. These documents help your loved ones make very difficult decisions and offer peace of mind during those difficult times.

Our sixth and final recommendation would be to create a digital asset form. This is something new that we have started at DFA because of the increasing amount of online accounts our clients hold. While this form is not legally binding it can be of immense assistance when closing an estate. The form we provide clients is more an inventory of their online accounts and information related to that account. For example any online banking accounts would be included along with their login and password information. In addition to financial accounts, we recommend including any online shopping memberships, social media sites such as Facebook or Instagram, and media accounts such as Netflix or Hulu. We recommend that this form be updated at least yearly as most clients are constantly adding new accounts and changing passwords. A copy of this form should be kept a minimum of two places, such as a safety deposit box and a home safe.

Recommended Timeline

1. Update Will within 6 months
2. Update all beneficiaries within 6 months
3. Designate power of attorney and durable power of attorney for healthcare within 1 year
4. Establish medical directives within 1 year
5. Establish living revocable trust within next 2 years
6. Complete digital asset form within 1 year (lowest priority)

Based on our recommendations please review what options you wish to pursue. Some of the options require a financial output to put in place and may be postponed but there is always the risk of having to go through probate. At a minimum we would recommend updating the wills of Mia and Tyler and creating power of attorney and durable power of attorney for healthcare. Because we do not anticipateyou having to pay any Estate or gift taxes, this will not be addressed at this time but if the need arrives as we continue to monitor accumulated wealth, we will address the issue at that time.

Implementation Checklist for Mia and Tyler Bedo

Recommendation	Who	When	Where	Why	How	Cash Flow Impact	Net Worth Impact
Open 20 year term life policies	Mia and Tyler	Within 1 month	At Insurance agency of choice	To establish significant funds to cover one or both deaths	Set up meeting with Insurance Agent to discuss options and costs	-$1,460	0
Update Will and Establish revocable trust and medical directives	Mia and Tyler	Within 6-12 months	Attorney of choice	To update Will and designated guardian for Becky	Make appointment with lawyer of choice	-1,500	-1,500 from savings
Refinance home mortgage	Mia and Tyler	Within 6 months	Bank where current mortgage is held	To reduce monthly payment and pay off house sooner	Make appointment with mortgage lender a bank	+348	none
Establish MOST 529 Education Savings Plan	Mia or Tyler	Within 1 year	Online through MOST 529 website	To fund Becky's college education	Set up monthly transfers from bank account to 529 account	-450	none
Sell EE Bonds and transfer to 529 plan	Mia or Tyler	Within 1 year	Through brokerage account	Additional funding for Becky's education	Fill out correct paperwork and transfer	0	none
Update Personal and Property Insurance Policies	Mia and Tyler	Within 1 year	At Insurance agency	Increase coverage and add coverage for boat	Meet with insurance agent to fill out proper forms and choose appropriate policies	+244	+244 to discretionary income
Reduce tax withholdings	Mia and Tyler	Beginning of next tax year	Human Resources at work	Additional income to cover expenses	Meet with HR representative at work to complete proper paperwork	+$8,000	None

Reallocate retirement and non-retirement investments	Mia and Tyler	Within the next 2 years	Online through corresponding account websites	Address risk tolerance and diversify accounts	Online through allocation form	+$268	Increase of +$268

Appendix

Insurance Needs for Tyler Calculations

Human Life Value Approach

Hand calculation= FSE Pmt =-73,392, N=20, I=3%, FV=$2,231,190

Second calculation

FV=$2,231,190, N=20, I=3% PV = $1,235,355.81

Capital –earnings Approach

Tyler total income=$104,722

Earnings after taxes =$73,392

Raise rate= 3%

Inflation rate=3%

Investment rate=5.25 conservative

Consumption by insured = 33%

Federal and state taxes=30%

104,722-31,416-34,558/(1.0525/1.03)-1=38,748/.022=$1,761,272

Insurance Needs for Mia Calculations

Human Life Value Approach

Pmt=-25,098

N= 20 years to retirement

I= 3.0% (inflation rate

Solve for FV= $674,392

Solve for PV insurance needs

FV=$674, 392

N=20

I=3.o

PV=$373,394

Capital Earnings Approach

Salary= 32,496

Consumption (1/3)= 10,723

Taxes (30%)= 9,748

Raise rate=3.0

Inflation rate=3.0

Investment rate=5.25 (conservative)

So 32,496-10,723-9,748/(1.052/1.03)-1= 12,025/.02136= $562,968

Insurance Quotations
From Humana Quote at: https://www.humana.com/insurance-plan-quotes/select-plan/

Dental Preventive Plus PPO

- Monthly premium $55.97
- Monthly administrative fee$1.00
- Deductible $50
- Enrollment fee $35.00
- Office visit copay Does not apply
- Routine cleaning and evaluation
- You pay $0
- Effective date 10/08/2018
- Waiting period 6 month waiting period on basic services

Dental Loyalty Plus PPO

- Monthly premium $86.97
- Monthly administrative fee$1.00
- Deductible $150
- Enrollment fee $35.00
- Office visit copay Does not apply
- Routine cleaning and evaluation
- You pay 0%
- Effective date 10/08/2018
- Waiting period No waiting periods

Dental Savings Plus None

- Monthly premium $9.99
- Monthly administrative fee$1.00
- Deductible $0
- Enrollment fee $15.00
- Office visit copay Save an average of $14
- Routine cleaning and evaluation
- Save an average of $14
- Effective date 10/08/2018
- Waiting period No waiting periods

If both dental and vision plans are purchased at the same time, you'll pay only one enrollment fee (Dental Savings Plus excluded).

Humana Vision PPO

- Monthly premium $39.99
- Monthly administrative fee $1.00
- Enrollment fee $35.00
- Routine exam
- You pay $15. Once every 12 months
- Contact lens exam
- You pay $40. Once every 12 months
- Effective date 10/08/2018
- Waiting period No waiting periods
- Frames
- $150 allowance then you pay 80%
- Elective contact lenses
- $150 allowance
- Lens options
- Savings are available; see benefit summary for more details
- Things to know
    - Frames/lenses or contact lens allowance once every 12 months. Select benefits displayed are based on services provided by in network providers. See benefit summary by clicking on the plan name for full coverage details.

College Funding Calculations

Determine Cost of 4 years of college needed at Year 1

Year 1: Pmt=0, PV=-20,000, I=5%, N=13 , FV= $37, 712

Year 2: Pmt=0, PV=-20,000, I=5%, N=14, FV=$39,598

Year 3: Pmt=0, PV=-20,000, I=5%, N=15, FV= $41,578

Year 4: Pmt=0, PV=-20,000, I=5%, N=16, FV= $43,657

Total Cost at beginning of year 1 = $162,545

Present Value of savings required as lump sum in today's dollars

Pmt=0, FV=162,545, I=7.0, N=13, PV=$67,450

Monthly savings needed to meet educational goals

PV=67,450, I=.5833, N=156, FV=0, Pmt= $659.70

Monthly savings need to meet educational goals if EE bonds are used

PV= 42,450 I=.5833, N=156, FV=0 Pmt= $415.18

Funds Offered by MOST 529 Savings Plan

	Unit value as of 10/09/2018				Average annual total returns as of 09/30/2018					
Name	Unit value	Change		YTD as of 10/09/2018	1 year	3 year	5 year	10 year	Since Inception**	Inception date
DFA International Core Equity Portfolio	$12.91	-$0.06	-0.46%	-6.18%	1.67%	—	—	—	12.44%	04/08/2016
DFA U.S. Small Cap Portfolio	$14.46	-$0.07	-0.48%	4.93%	12.73%	—	—	—	17.69%	04/08/2016
DFA U.S. Core Equity 1 Portfolio	$14.78	-$0.05	-0.34%	7.33%	17.08%	—	—	—	18.03%	04/08/2016
DFA U.S. Large Cap Value Portfolio	$14.68	-$0.06	-0.41%	3.23%	11.10%	—	—	—	16.86%	04/08/2016
DFA Two-Year Global Fixed Income Portfolio	$10.15	$0.00	0.00%	0.69%	0.59%	—	—	—	0.64%	04/08/2016
Vanguard Total International Stock Index Portfolio	$12.82	-$0.04	-0.31%	-6.70%	1.45%	9.75%	4.27%	—	3.97%	06/02/2011
Vanguard Total Stock Market Index Portfolio	$24.79	-$0.05	-0.20%	8.63%	17.37%	16.84%	13.20%	—	13.44%	06/02/2011
Vanguard Aggressive Growth Portfolio	$22.16	-$0.04	-0.18%	2.40%	10.84%	14.15%	10.18%	9.43%	6.88%	06/02/2006
Vanguard Aggressive Portfolio*	$10.54	-$0.02	-0.19%	1.93%	—	—	—	—	7.90%	10/20/2017
Vanguard Growth Portfolio	$21.25	-$0.03	-0.14%	1.63%	8.61%	11.58%	8.64%	8.49%	6.49%	06/02/2006
Vanguard Blended Growth Portfolio*	$10.40	-$0.01	-0.10%	1.27%	—	—	—	—	6.00%	10/20/2017
Vanguard Moderate Growth Portfolio	$20.15	-$0.01	-0.05%	0.85%	6.38%	9.11%	7.12%	7.46%	6.00%	06/02/2006
Vanguard Blended Moderate Growth Portfolio*	$10.25	-$0.01	-0.10%	0.39%	—	—	—	—	4.20%	10/20/2017
Vanguard Conservative Growth Portfolio	$18.76	$0.00	0.00%	0.11%	4.11%	6.58%	5.53%	6.27%	5.35%	06/02/2006
Vanguard Conservative Portfolio*	$10.11	$0.01	0.10%	-0.39%	—	—	—	—	2.30%	10/20/2017
Vanguard Income Portfolio	$17.24	$0.01	0.06%	-0.86%	1.81%	4.01%	3.88%	4.95%	4.61%	06/02/2006
Vanguard Blended Income Portfolio*	$9.96	$0.01	0.10%	-1.29%	—	—	—	—	0.50%	10/20/2017
Vanguard Conservative Income Portfolio	$14.60	$0.02	0.14%	-0.34%	0.48%	1.45%	1.68%	2.74%	3.15%	06/02/2006

(Portfolio Prices and Performance, 2018)

Annuity Model of Capital Needs Analysis Retiring at age 67 for Tyler and Mia

Step 1: Determine funding amount in today's dollars		
	$135,194	Salary
	85%	WRR
	$114,914	Total needs in today's dollars
	$53,676	Less Social Security in today's dollars (age 62)
	$61,238	Annual amount needed in today's dollars
Step 2: Inflate needs from Step 1 to beginning of retirement		
N	25	67-42 WLE
I	3.0	Inflation
PV	61,238	Retirement needs in today's dollars
PMT	0	Not applicable for this calculation
FV	$128,218	First year needs for retirement
Step 3: Determine the funding needs at retirement age		
N	28	95-67 RLE
I	5.25	conservative rate
FV	0	
PMT	$128,218	From Step 2
PV	$1,859,378	Total need for retirement at age 62
Step 4: Determine the required annual savings amount		
FV	$1,859,378	From Step 3
N	25	67-42
I	7.75	Moderately conservative rate
PV	$479,750	Current balance in retirement accounts
PMT	$0	Yearly annual savings needed

Capital Preservation Model of Capital Needs Analysis

Capital Preservation Model	
N	28
I	5.25
FV	$1,859,378
PMT	0
PV	443,760+1,859,378=$2,303,138
Calculate Annual Savings needed	
N	25 (67-42)
I	7.75
PV	479,750
FV	2,303,138
Annual Savings needed to retire at age 67	0

Beta Analysis

Quick Reference

Beta<1	Stock is less volatile than the market as a whole
Beta>1	Stock is more volatile than the market as a whole
Beta<0	Stock is losing money while markets are gaining as a whole

Betas of Selected Funds

Fund	Beta
Growth Fund large cap	1.025
Value Fund large cap	.875
Konza Fund mid-cap	.80
Eastside Fund mid-cap	.711
Sagebrush small cap	.92
Rocket Fund small cap	1.20
Int'l Fund	.769

References

Beta. (2018, October 18). Retrieved from Investopedia: https://www.investopedia.com/terms/b/beta.asp

Boat Insurance Cost. (2018, October 9). Retrieved from Trusted Choice: https://www.trustedchoice.com/boat-insurance/coverage-cost/

Carther, S. (2018, March 21). *Understanding Volatility Measurements*. Retrieved from Investopedia: https://www.investopedia.com/investing/understanding-volatility-measurements/

CFP Board. (2018, September 13). *Code of Ethics and Professional Responsibility*. Retrieved from CFP Board: https://www.cfp.net/for-cfp-professionals/professional-standards-enforcement/current-standards-of-professional-conduct/standards-of-professional-conduct/code-of-ethics-professional-responsibility

College of the Ozarks. (2018, October 2018). Retrieved from https://www.google.com/search?q=private+colleges+in+missouri&ie=utf-8&oe=utf-8&client=firefox-b-1&ibp=htl;splinter&rciv=spl#htidocid=jRR_irtLNUSZF7sjAAAAAA%3D%3D

Dalton, J. F., Dalton, M. A., Langdon, T. P., & and Gillice, J. M. (2015). *Insurance Planning.* St. Rose: Money Education.

Dalton, J., Dalton, M., Langdon, T., & Gillice, J. (2015). *Insurance Planning.* St. Rose: Money Education.

Dalton, M. A. (2016). *Estate Planning.* St. Rose: Money Education.

Disability Income Insurance. (2018, October 5). Retrieved from Mutual of Omaha: https://www.mutualofomaha.com/disability-insurance/products/long-term-disability-insurance

Flow Financial Planning. (2018, Sept. 13). *Privacy Notice*. Retrieved from Flow Financial Planning: https://flowfp.com/privacy-notice/

Grable, J. E. (2016). *The Case Approach to Financial Planning: Bridging the Gap between Theory and Practice.* Erlanger: The National Underwriter Company.

Lalor, C. (2018, May 14). *$250,000 20 Year Term Life Insurance Policy*. Retrieved from Life Insurance Shopping Reviews: https://www.lifeinsuranceshoppingreviews.com/250000-20-year-term-life-insurance-policy-rates-cost-quote/

Long-Term Care Insurance. (2018, October 5). Retrieved from Mutual of Omaha: https://www.mutualofomaha.com/disability-insurance/products/long-term-disability-insurance

Murphy, C. (2018, May 18). *What is the difference between yield and return?* Retrieved from Investopedia: https://www.investopedia.com/ask/answers/difference-between-yield-and-return/

Portfolio Prices and Performance. (2018, October 19). Retrieved from Missouri's 529 Savings Plan: https://www.missourimost.org/motpl/fund/pricePerformance.cs

Progressive Car Insurance Quote. (2018, October 9). Retrieved from Progressive Insurance: https://www.progressive.com/auto/

Roelofs, L. D. (2016, October 4). *The Case for College Work Programs*. Retrieved from Inside Higher Ed.: https://www.insidehighered.com/views/2016/10/04/how-college-work-programs-benefit-both-student-and-institution-essay

Rose, J. (2018, August 27). *How Much Does a Million Dollar Term Life Insurance Policy Cost?* Retrieved from Good Financial Cents: https://www.goodfinancialcents.com/how-much-does-a-million-dollar-term-life-insurance-policy-cost/

State Farm Home Insurance Quote. (2018, October 9). Retrieved from State Farm Insurance: https://fire.statefarm.com/HomeownersQuotePurchase-web/app/optionalLogin?conversationId=3705fdea-95ac-4eb3-b577-4450b1e6a3c4

Wong, K. (2015, October 27). *How Much Money You Can Save Bundling Your Insurance Policies, By State*. Retrieved from Two Cents: https://twocents.lifehacker.com/how-much-money-you-can-save-bundling-your-insurance-pol-1738802733